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IN THE CLAIMS

1. (Previously amended) A method for stimulating a human cochlea in response to a sound, comprising:

generating an electrical sound signal in response to the sound;

generating an electrical analog carrier signal having a frequency greater than 20 kHz;

modulating the carrier signal with the sound signal to generate a modulated signal; and

applying the modulated signal to an electrode that is electrically coupled with the cochlea such that the modulated signal is applied to the cochlea.

2. (Original) The method of claim 1, wherein modulating is by amplitude modulation.

3. (Original) The method of claim 1, wherein modulating is by frequency modulation.

4. (Original) The method of claim 1, wherein the electrical analog carrier signal has a frequency of at least 32 kHz.

5. (Original) The method of claim 4, wherein modulating is by amplitude modulation.

6. (Original) The method of claim 4, wherein modulating is by frequency modulation.

7. (Previously amended) A cochlear implant system for a patient's cochlea comprising:

at least one electrode for electrical coupling with the patient's cochlea;

an internal coil for implanting in the patient to drive the electrode;

a microphone for outputting electrical sound signals in response to external sounds;

an oscillator for generating an electrical analog carrier signal having a frequency greater than 20 kHz;

a modulator for modulating the carrier signal with the sound signals to generate a modulated signal; and

an external coil for magnetically coupling the modulated signal to the internal coil such that the modulated signal is electrically applied to the cochlea.

8. (Original) The system of claim 7, wherein the modulator is an amplitude modulator.

9. (Original) The system of claim 7, wherein the modulator is a frequency modulator.

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10. (Original) The system of claim 7, wherein the electrical analog carrier signal has a frequency of at least 32 kHz.

11. (Original) The system of claim 10, wherein the modulator is an amplitude modulator.

12. (Original) The system of claim 10, wherein the modulator is a frequency modulator.